BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Asphalting to Synikavihara Layout Cross Roads in Chowdeshwari Ward No-02 of Yelahanka Sub Division

Measurements Taken On :

MEASUREMENT SHEET

First and Final Bill

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Remarks	Rate in Rs	Amount in Rs
1		Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 8km lead, Complete as per specification and direction of site engineer in incharge									
		Vide Total executed Quantity from premeasuremet Page no.						679.36			
		Total Executed Quantity						679.36			
		Tender Quantity						665.87			
		Now to be Paid Quantity									
		Quantity Limited To						665.87		62.00	41283.94
2		Construction of granular sub-base GRADING-V as sub base and drainage layer by providing coarse graded crushed stone aggregates of granite / trap / basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98% proctor density. Complete as per specification and direction of site engineer in incharge									
			Cum								
		Vide Total executed Quantity from premeasuremet Page no.						291.16			
		Total Executed Quantity						291.16			
		Tender Quantity						285.36			
		Now to be Paid Quantity									
		Quantity Limited To						285.36		1935.00	552171.60
3		Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Complete as per specification and direction of site engineer in incharge									
			Cum								
		Vide Total executed Quantity from premeasuremet Page no.						446.44			
		Total Executed Quantity						446.44			
		Tender Quantity						437.55			
		Now to be Paid Quantity									
		Quantity Limited To						437.55		1941.00	849284.55
4		Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular such as WMM including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means, Complete as per specification and direction of site engineer in incharge									
			Sqm								
		Vide Total executed Quantity from premeasuremet Page no.						1941.04			
		Total Executed Quantity						1941.04			
		Tender Quantity						1902.40			
		Now to be Paid Quantity									
		Quantity Limited To						1902.40		28.00	53267.20
5		Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects Complete as per specification and direction of site engineer in incharges									

Contactor

Assistant Engineer

Asst. Executive Engineer
Yelahanka Sub. Division
(BBMP) Yelahanka, Bangalore

Assistant Executive Engineer

Yelahanka, Bangalore

		Cum									
		Vide Total executed Quantity from premeasuremet Page no.						97.05			
							Total Executed Quantity	97.05			
							Tender Quantity	95.12			
							Now to be Paid Quantity				
							Quantity Limited To	95.12		6400.00	608768.00
6		Providing and applying tack coat using 80/100 grade bitumen (VG10) on the prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM Complete as per specification and direction of site engineer in incharge									
		Sqm									
		Vide Total executed Quantity from premeasuremet Page no.						1941.04			
							Total Executed Quantity	1941.04			
							Tender Quantity	1902.40			
							Now to be Paid Quantity				
							Quantity Limited To	1902.40		12.30	23399.52
7		Providing and laying Bituminous Concrete 40 mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment , rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects Complete as per specification and direction of site engineer in incharge									
Measurements Taken On		10-7-2020									
		Cross Road-1									
0	15		Cum	1	15.00	5.68	0.03	2.52			
15	30		Cum	1	15.00	5.90	0.03	2.66			
30	45		Cum	1	15.00	5.95	0.03	2.68			
45	60		Cum	1	15.00	6.00	0.03	2.70			
60	75		Cum	1	15.00	6.00	0.03	2.70			
75	90		Cum	1	15.00	6.00	0.03	2.70			
90	105		Cum	1	15.00	6.03	0.03	2.71			
105	120		Cum	1	15.00	6.05	0.03	2.72			
120	135		Cum	1	15.00	6.08	0.03	2.73			
135	150		Cum	1	15.00	6.10	0.03	2.75			
150	165		Cum	1	15.00	6.13	0.03	2.76			
165	180		Cum	1	15.00	6.15	0.03	2.77			
180	195		Cum	1	15.00	6.15	0.03	2.77			
195	210		Cum	1	15.00	6.15	0.03	2.77			
210	225		Cum	1	15.00	6.15	0.03	2.77			
225	227		Cum	1	2.00	6.03	0.03	0.36			
		Cross Road-2									
0	15		Cum	1	15.00	5.20	0.03	2.34			
15	30		Cum	1	15.00	5.20	0.03	2.34			
30	45		Cum	1	15.00	5.48	0.03	2.46			
45	60		Cum	1	15.00	5.75	0.03	2.59			
60	75		Cum	1	15.00	5.75	0.03	2.59			
75	90		Cum	1	15.00	5.83	0.03	2.62			
90	102.7		Cum	1	12.70	5.88	0.03	2.24			
							TOTAL	58.23			
							Qty Limited To	57.01		7521.3	429240.591
8		Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminus Surface/ Concrete Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes Complete as per specification and direction of site engineer in incharge									
Measurements Taken On											
		Cross Road-1									

Contactor

Assistant Engineer

Asst. Executive Engineer
Yelahanka Sub. Division
(BBMP)
Yelahanka, Bangalore

Assistant Executive Engineer
Yelahanka, Bangalore

		Edge Line									
0	227		Sqm	2	227.00	0.10		45.40			
		Center line									
0	227		Sqm	0.50	227.00	0.10		11.35			
		Cross Road-2									
		Edge Line									
0	102.7		Sqm	2	102.70	0.10		20.54			
		Center line									
0	102.7		Sqm	0.50	102.70	0.10		5.14			
							TOTAL	82.43		441.00	36349.425
										Sub Total amount	2593764.83
										12% GST	311251.78
										Total amount	2905016.61

A.E.E

AE02

Asst. Executive Engineer
Yelahanka Sub. Division
(BBMP Ynk. Zn)
Yelahanka, Bangalore
6/7/2020

Contactor

Assistant Engineer

Assistant Executive Engineer

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Asphalting to Synikavihara Layout Cross Roads in Chowdeshwari Ward No-02 of Yelahanka Sub Division

Measurements Taken On :

PRE MEASUREMENT SHEET

First and Final Bill

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Remarks
1		Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 8km lead, Complete as per specification and direction of site engineer in incharge							
Measurements Taken On		22-6-2020							
		Cross Road-1							
0	15		Cum	1	15.00	5.60	0.35	29.40	
15	30		Cum	1	15.00	5.90	0.35	30.98	
30	45		Cum	1	15.00	5.95	0.35	31.24	
45	60		Cum	1	15.00	6.00	0.35	31.50	
60	75		Cum	1	15.00	6.00	0.35	31.50	
75	90		Cum	1	15.00	6.00	0.35	31.50	
90	105		Cum	1	15.00	6.03	0.35	31.63	
105	120		Cum	1	15.00	6.05	0.35	31.76	
120	135		Cum	1	15.00	6.08	0.35	31.89	
135	150		Cum	1	15.00	6.10	0.35	32.03	
150	165		Cum	1	15.00	6.13	0.35	32.16	
165	180		Cum	1	15.00	6.15	0.35	32.29	
180	195		Cum	1	15.00	6.15	0.35	32.29	
195	210		Cum	1	15.00	6.15	0.35	32.29	
210	225		Cum	1	15.00	6.15	0.35	32.29	
225	227		Cum	1	2.00	6.03	0.35	4.22	
		Cross Road-2							
0	15		Cum	1	15.00	5.20	0.35	27.30	
15	30		Cum	1	15.00	5.20	0.35	27.30	
30	45		Cum	1	15.00	5.48	0.35	28.74	
45	60		Cum	1	15.00	5.75	0.35	30.19	
60	75		Cum	1	15.00	5.75	0.35	30.19	
75	90		Cum	1	15.00	5.83	0.35	30.58	
90	102.7		Cum	1	12.70	5.88	0.35	26.11	
							TOTAL	679.36	
							Qty Limited To	665.87	

A.E.E

Contactor

Assistant Engineer

Asst. Executive Engineer
Yelahanka Sub. Division
Assistant Executive Engineer
Yelahanka, Bangalore

2		Construction of granular sub-base GRADING-V as sub base and drainage layer by providing coarse graded crushed stone aggregates of granite / trap / basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98% proctor density. Complete as per specification and direction of site engineer in incharge							
Measurements Taken On		22-06-2020							
		Cross Road-1							
0	15		Cum	1	15.00	5.60	0.15	12.60	
15	30		Cum	1	15.00	5.90	0.15	13.28	
30	45		Cum	1	15.00	5.95	0.15	13.39	
45	60		Cum	1	15.00	6.00	0.15	13.50	
60	75		Cum	1	15.00	6.00	0.15	13.50	
75	90		Cum	1	15.00	6.00	0.15	13.50	
90	105		Cum	1	15.00	6.03	0.15	13.56	
105	120		Cum	1	15.00	6.05	0.15	13.61	
120	135		Cum	1	15.00	6.08	0.15	13.67	
135	150		Cum	1	15.00	6.10	0.15	13.73	
150	165		Cum	1	15.00	6.13	0.15	13.78	
165	180		Cum	1	15.00	6.15	0.15	13.84	
180	195		Cum	1	15.00	6.15	0.15	13.84	
195	210		Cum	1	15.00	6.15	0.15	13.84	
210	225		Cum	1	15.00	6.15	0.15	13.84	
225	227		Cum	1	2.00	6.03	0.15	1.81	
		Cross Road-2							
0	15		Cum	1	15.00	5.20	0.15	11.70	
15	30		Cum	1	15.00	5.20	0.15	11.70	
30	45		Cum	1	15.00	5.48	0.15	12.32	
45	60		Cum	1	15.00	5.75	0.15	12.94	
60	75		Cum	1	15.00	5.76	0.15	12.94	
75	90		Cum	1	15.00	5.82	0.15	13.11	
90	102.7		Cum	1	12.70	5.88	0.15	11.19	
							TOTAL	291.16	
							Qty Limited To	285.36	

A.E.E

Contactor

Assistant Engineer

Yelahanka Sub. Division
(BBMP Ynk. Zn)
Yelahanka, Bangalore
Assistant Executive Engineer

3	**Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Complete as per specification and direction of site engineer in incharge**								
Measurements Taken On		26-06-2020							
		Cross Road-1							
0	15		Cum	1	15.00	5.60	0.23	19.32	
15	30		Cum	1	15.00	5.90	0.23	20.36	
30	45		Cum	1	15.00	5.95	0.23	20.53	
45	60		Cum	1	15.00	6.00	0.23	20.70	
60	75		Cum	1	15.00	6.00	0.23	20.70	
75	90		Cum	1	15.00	6.00	0.23	20.70	
90	105		Cum	1	15.00	6.03	0.23	20.79	
105	120		Cum	1	15.00	6.05	0.23	20.87	
120	135		Cum	1	15.00	6.08	0.23	20.96	
135	150		Cum	1	15.00	6.10	0.23	21.05	
150	165		Cum	1	15.00	6.13	0.23	21.13	
165	180		Cum	1	15.00	6.15	0.23	21.22	
180	195		Cum	1	15.00	6.15	0.23	21.22	
195	210		Cum	1	15.00	6.15	0.23	21.22	
210	225		Cum	1	15.00	6.15	0.23	21.22	
225	227		Cum	1	2.00	6.03	0.23	2.77	
		Cross Road-2							
0	15		Cum	1	15.00	5.20	0.23	17.94	
15	30		Cum	1	15.00	5.20	0.23	17.94	
30	45		Cum	1	15.00	5.48	0.23	18.89	
45	60		Cum	1	15.00	5.75	0.23	19.84	
60	75		Cum	1	15.00	5.75	0.23	19.84	
75	90		Cum	1	15.00	5.83	0.23	20.10	
90	102.7		Cum	1	12.70	5.88	0.23	17.16	
							TOTAL	446.44	
							Qty Limited To	437.85	

Contactor

Assistant Engineer AE-02

Yelahanka Sub. Division
(BBMP Ynk. Zn)
Assistant Executive Engineer

4	**Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular such as WMM including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means, Complete as per specification and direction of site engineer in incharge**
Measurements Taken On	27-6-2020

		Cross Road-1							
0	15		Sqm	1	15.00	5.60		84.00	
15	30		Sqm	1	15.00	5.90		88.50	
30	45		Sqm	1	15.00	5.95		89.25	
45	60		Sqm	1	15.00	6.00		90.00	
60	75		Sqm	1	15.00	6.00		90.00	
75	90		Sqm	1	15.00	6.00		90.00	
90	105		Sqm	1	15.00	6.03		90.38	
105	120		Sqm	1	15.00	6.05		90.75	
120	135		Sqm	1	15.00	6.08		91.13	
135	150		Sqm	1	15.00	6.10		91.50	
150	165		Sqm	1	15.00	6.13		91.88	
165	180		Sqm	1	15.00	6.15		92.25	
180	195		Sqm	1	15.00	6.15		92.25	
195	210		Sqm	1	15.00	6.15		92.25	
210	225		Sqm	1	15.00	6.15		92.25	
225	227		Sqm	1	2.00	6.03		12.05	
		Cross Road-2							
0	15		Sqm	1	15.00	5.20		78.00	
15	30		Sqm	1	15.00	5.20		78.00	
30	45		Sqm	1	15.00	5.48		82.13	
45	60		Sqm	1	15.00	5.75		86.25	
60	75		Sqm	1	15.00	5.75		86.25	
75	90		Sqm	1	15.00	5.83		87.38	
90	102.7		Sqm	1	12.70	5.88		74.61	
							TOTAL	1941.04	
							Qty Limited To	1902.40	

Contactor

Assistant Engineer

Asst. Executive Engineer
Yelahanka Sub. Division
(BBMP Ynk. Zn)
Assistant Executive Engineer

5		Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects Complete as per specification and direction of site engineer in incharges							
Measurements Taken On		30-6-2020							
		Cross Road-1							
0	15		Cum	1	15.00	5.60	0.05	4.20	
15	30		Cum	1	15.00	5.90	0.05	4.43	
30	45		Cum	1	15.00	5.95	0.05	4.46	
45	60		Cum	1	15.00	6.00	0.05	4.50	
60	75		Cum	1	15.00	6.00	0.05	4.50	
75	90		Cum	1	15.00	6.00	0.05	4.50	
90	105		Cum	1	15.00	6.03	0.05	4.52	
105	120		Cum	1	15.00	6.05	0.05	4.54	
120	135		Cum	1	15.00	6.08	0.05	4.56	
135	150		Cum	1	15.00	6.10	0.05	4.58	
150	165		Cum	1	15.00	6.13	0.05	4.59	
165	180		Cum	1	15.00	6.15	0.05	4.61	
180	195		Cum	1	15.00	6.15	0.05	4.61	
195	210		Cum	1	15.00	6.15	0.05	4.61	
210	225		Cum	1	15.00	6.15	0.05	4.61	
225	227		Cum	1	2.00	6.03	0.05	0.60	
		Cross Road-2							
0	15		Cum	1	15.00	5.20	0.05	3.90	
15	30		Cum	1	15.00	5.20	0.05	3.90	
30	45		Cum	1	15.00	5.48	0.05	4.11	
45	60		Cum	1	15.00	5.75	0.05	4.31	
60	75		Cum	1	15.00	5.75	0.05	4.31	
75	90		Cum	1	15.00	5.83	0.05	4.37	
90	102.7		Cum	1	12.70	5.88	0.05	3.73	
							TOTAL	97.05	
							Qty Limited To	95.12	

Contactor

Assistant Engineer

Asst. Executive Engineer
Yelahanka Sub. Division
(BBMP Ynk. Zn)
Yelahanka, Bangalore
Assistant Executive Engineer

6	Providing and applying tack coat using 80/100 grade bitumen (VG10) on the prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM Complete as per specification and direction of site engineer in incharge							
Measurements Taken On		30-6-2020						
0	15		Sqm	1	15.00	5.60		84.00
15	30		Sqm	1	15.00	5.90		88.50
30	45		Sqm	1	15.00	5.95		89.25
45	60		Sqm	1	15.00	6.00		90.00
60	75		Sqm	1	15.00	6.00		90.00
75	90		Sqm	1	15.00	6.00		90.00
90	105		Sqm	1	15.00	6.03		90.38
105	120		Sqm	1	15.00	6.05		90.75
120	135		Sqm	1	15.00	6.08		91.13
135	150		Sqm	1	15.00	6.10		91.50
150	165		Sqm	1	15.00	6.13		91.88
165	180		Sqm	1	15.00	6.15		92.25
180	195		Sqm	1	15.00	6.15		92.25
195	210		Sqm	1	15.00	6.15		92.25
210	225		Sqm	1	15.00	6.15		92.25
225	227		Sqm	1	2.00	6.03		12.05
		Cross Road-2						
0	15		Sqm	1	15.00	5.20		78.00
15	30		Sqm	1	15.00	5.20		78.00
30	45		Sqm	1	15.00	5.48		82.13
45	60		Sqm	1	15.00	5.75		86.25
60	75		Sqm	1	15.00	5.75		86.25
75	90		Sqm	1	15.00	5.83		87.38
90	102.7		Sqm	1	12.70	5.88		74.61
							TOTAL	1941.04
							Qty Limited To	1902.40

Contactor

Assistant Engineer

AE-02

Asst. Executive Engineer
Yelahanka Sub-Division
(BBMP Ynk. Zn)
Yelahanka, Bangalore

Assistant Executive Engineer